425-201

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MANUAL OF PATENT EXAMINING PROCEDURE

PTO/SB/14**>(01-96)<

Approved for use through 05/31/96. OMB 0651-0033 Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

EORM FOR FILING A PATENT APPLICATION UNDER 37 CFR 1.62

DOCKET NUMBER	OF THIS A	TED CLASSIFICATION PPLICATION I SUBCLASS	PRIOR APPLICATION EXAMINER	ART UNIT
95-004M	180	179.000	Mar,M	3106

Address to:

>Assistant < Commissioner * >for < Patents **

Washington, D.C. 2023 This is a Request for filing a Continuation-in-part, Continuation, divisional application under 37 CFR 1.62 of prior application Number 08443, 204 filed on 05/18/95 entitled Extended Range Motor

Vehicle Having Ambient Pollutant Processioning following named inventor(s):					
FULL NAME OF INVENTOR	FAMILY NAME Gardner	FIRST GIVEN NAME Conrad	SECOND GIVEN NAME Oliver		
RESIDENCE & CITIZENSHIP	Seattle	STATE OR FOREIGN COUNTRY Wa. 98121	COUNTRY OF CITIZENSHIP U.S.A.		
POST OFFICE ADDRESS	POST OFFICE ADDRESS 2600 2nd Ave#2103	Seattle	Wa 98121		
FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME		
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP		
POST OFFICE ADDRESS	POST OFFICE ADORESS	CITY	STATE & ZIP CODE / COUNTRY		
FULL NAME OF INVENTOR	FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME		
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP		
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE & ZIP CODE / COUNTRY		

Additional inventors are being named on separately numbered sheet(s) attached hereto.

The above identified prior application in which no payment of the issue fee, abandonment of, or termination of proceedings has occurred, is hereby expressly abandoned under 37 CFR 1.62(g) as of the filing date of this new application. Please use all the contents of the prior application file wrapper, including the drawings, as the basic papers for the new application. (No new specification is required, 37 CFR 1.62(e).) (Note: 37 CFR 1.60 may be used for continuation or divisional applications where the prior application is not to be abandoned.)

- Enter the unentered amendment previously filed on under 37 CFR 1.116 in the prior application.

 A preliminary amendment is enclosed.
- 2.
- This application is being filed by less than all the inventors named in the application. The Commissioner is requested 3. under 37 CFR 1.62(a) to delete the names of the following person or persons from the prior application who are not inventors of the invention being claimed in this application:

CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
CLAINS	TOTAL CLAIMS (37 CPR 1.16(4))	- 20 =	0	x \$=	s 0
	INDEPENDENT CLAIMS (37 CFR L16(b))	12 4-3=	1	x \$ =	80
	MULTIPLE DEPEN	DENT CLAIMS (if applic	able) (37 CFR 1.16(4))	+ \$=	0
			(37 (SIC FEE FR 1.14(=))	+ 770
	*************************		ASSESSED TOTAL OF SOUTH C		850
	Reduction by 50% for filing by small entity (Note 37 CFR 1.9, 1.27, 1.28).			425	
				TOTAL =	425

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take **>0.5 hour< to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the ** > Chief Information Officer <, Patent and Trademark Office, Washington, D.C. 20231**. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: >Assistant < Commissioner *> for < Patents **, Box FWC, Washington, D.C. 20231.

PTO/SE/14**>(01-96) <
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(REQUEST FORM FOR FILING A PATENT APPLICATION UNDER 37 CFR 1.62, Page 2)

4. [A verified statement to establi is enclosed. was filed in the prior apple			CFR 1.9 and 1.27 roper and desired (37 CFR 1.28(a)).
5.	The Commissioner is hereby as required, or credit any overpay copy of this form is enclosed.)	uthorized to cha yment to Depos	arge fees under 3 it Account No	7 CFR 1.16 and 1.17 which may be
6. 🔼	A check in the amount of \$	425	_ is enclosed.	
7.	A new oath or declaration in co continuation-in-part which disc	ompliance with closes and clain	37 CFR 1.63 is instantial and additional and	ncluded since this application is a fer.
8. 🗔	Amend the specification by ins	erting before th	e first line the se	ntence:
	This application is a continuous	uation-in-part, filed <u>05/18</u>	Continuation,	division, of application now abandoned.
9. 🗀	Priority of foreign application r	number	, filed	on in is claimed under 35 U.S.C. 119 >(a) -(d) -
10.	The prior application is assigned			
11.	The power of attorney in the pr	rior application	is to: (name & a	ddress)
	Also enclosed:	(May only be c	ompleted by app	licant, or attorney or agent of record)
	Conrad O.			
	Seattle, W			
It is us access either may p	anderstood that secrecy under 35 is is available to any one of the air this application or a prior application or a prior application or according to the similar information under 37 Certification unde	U.S.C. 122 is I pplications in the cation in the same costs to all the costs to all the costs to all the costs.	nereby waived to ne file wrapper o	the extent that if information or f a 37 CFR 1.62 application, be it the Patent and Trademark Office in the same file wrapper. June rdner
	Registration number if acting under 37 CFR 1.34(a).			
		[Page	2 of 2]	

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant: Conrad O. Gardner Art Unit:3106

Application No.: FWC of S.N. 08/443,204

Examiner: Mar,M Docket No.: 95-004M

For: Extended Range Motor Vehicle Having Ambient Pollutant

Processing

Box: FWC 6/17/97

Assistant Commissioner for Patents

Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Please amend the application as follows:

IN THE CLAIMS

Please add the following claims:

34. In combination, a hybrid motor vehicle comprising: an electric motor connected to a first pair of wheels:

a cruise mode control circuit having preprogrammed cruise mode operating conditions, said control circuit automatically activating first coupling means for connecting a combustion engine to a second pair of wheels during a cruise mode on condition and deactivating said first coupling means during a cruise mode off condition, and said control circuit activating second coupling means for connecting said combustion engine to an electric generator for charging a battery during the cruise mode off condition;

said combustion engine running in an optimum mode at substantially constant speed and power output level.

- 35. The combination according to claim 34 wherein said cruise mode off condition for charging a battery comprises a speed less than a predetermined value.
 - 36. The combination according to claim 34 wherein in the event of an inoperable electric power condition under cruise mode off condition, said combustion engine is connected by said first coupling means to said second pair of wheels.
 - 37.A controller of a hybrid electric vehicle having an engine (22) and a motor (12) for controlling driving of the engine (22) and the motor (12), comprising:

a battery(58) for supplying electric power to the motor(12) motor-generated driving force transfer means(14) for transferring the driving force generated by the motor(12) to wheels(18);

a power generator(78) driven by the engine(22) to supply generated electric power to the battery(58);

engine-generated driving force transfer means (75) for transferring the driving force generated by the engine (22) to the wheels (28);

means for detecting a vehicle running state (44); and control means (30) for controlling whether to transfer a driving force generated by an engine (22) to a power generator (78) or wheels (28) in accordance with a vehicle running state, wherein the control means (30) transfers the driving force generated by the engine (22) to wheels (28) when said running state is more than a predetermined value, transfers the driving force generated by the engine (22) to the power generator (78) when said running state is less than a predetermined value.

38. A controller according to claim 37 wherein said control means (30) sets a period for transferring driving forcess generated by the engine (22) to wheels (28) when said running state changes from a value less than a predetermined value

to a value larger than the predetermined value.

- 39. A controller according to claim 38 wherein said period is about 45 seconds.
- 40. A controller according to claim 37 wherein said running state is vehicle speed.
- 41. A controller according to claim 40 wherein said vehicle speed is about 40 miles per hour.

REMARKS

Claims 30-33 stand allowed.

Claims 34 and 37 comprise two further independent claims which have been added to further define with specificity applicants contribution to the advancement of the hybrid motor vehicle art.

Claim 34 adopts identical language of allowed claims 30 and 32 (the first eight lines thereof). Claim 34 further defines an operating range for the combustion engine over narrow ranges of speed and load therefore permitting the combuston engine to be operated continuously near peak efficiency. See e.g. page 2/lines 19-24 for antecedent support.

Independent claim 37 is a detail ed comprehensive claim defining the present system. Numerals are inserted for reference to antecedent basis in the exemplary embodiment described in the specification. Claims 38 and 39 define a period of transfer referenced in claim 37 (See page5, line 6).

Claims 35 and 36 dependent from claim 34 add further speificity to the definition of the system of claim 34, e.g. claim 36 references peration in the event of a power failure under cuise mode off condition (See page 7, line 29 on). Claims 40 and 41 relate to vehicle speed.

It is believed that the claims presented clearly define over the prb r art which notice is respectfully solicited.

Respectfull y submitted,

Conrad O. Gardner

Tel.: Area 206 544 1058